SEQUENCE LISTING

(1) GENERAL INFORMATION:

    (i) APPLICANT: Henrik Stender
                       Kaare Lund
                       Tina Anderson Hollerup

        (ii) TITLE OF INVENTION: Novel Process For The Detection of
Mycobacteria

      (iii) NUMBER OF SEQUENCES: 123

       (iv) CORRESPONDENCE ADDRESS:

            (A) ADDRESSEE: FINNEGAN, HENDERSON, FARABOW, GARRETT,
& DUNNER
            (B) STREET: 1300 I ST. NW
            (C) CITY: Washington
            (D) STATE: District of Columbia
            (E) COUNTRY: USA
            (F) ZIP: 20005

        (v) COMPUTER READABLE FORM:
            (A) MEDIUM TYPE: Floppy disk 3.5 inch
            (B) COMPUTER: IBM PC compatible
            (C) OPERATING SYSTEM: ASCxi
            (D) SOFTWARE: Microsoft Word

       (vi) CURRENT APPLICATION DATA:
            (A) APPLICATION NUMBER: 10/347,510
            (B) FILING DATE: 1/21/2003

      (vii) PRIOR APPLICATION DATA:
            (A) APPLICATION NUMBER: 60/028,392
            (B) FILING DATE: 10/15/96
            (A) APPLICATION NUMBER: 60/029,595
            (B) FILING DATE: 10/23/96
            (A) APPLICATION NUMBER: 60/045,962
            (B) FILING DATE: 05/08/97
            (A) APPLICATION NUMBER: 08/943,777
            (B) FILING DATE: 10/3/97

     (viii) ATTORNEY/AGENT INFORMATION:
    (A) NAME: Anthony C. Tridico
    (B) REGISTRATION NUMBER: 45,958

       (ix) TELECOMMUNICATION INFORMATION:
            (A) TELEPHONE: (202) 408-4173
            (B) TELEFAX: (202) 408-4400

(2) INFORMATION FOR SEQ ID NO: 1:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

AGATCGGGGT AGCAC 15

(2) INFORMATION FOR SEQ ID NO: 2:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

TGTTTTCTCC TCCTA 15

(2) INFORMATION FOR SEQ ID NO: 3:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

ACTGCCTCTC AGCCG 15

(2) INFORMATION FOR SEQ ID NO: 4:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

TGATACTAGG CAGGT 15

(2) INFORMATION FOR SEQ ID NO: 5:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

CGGATTCACA GCGGA 15

(2) INFORMATION FOR SEQ ID NO: 6:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

TCACCACCCT CCTCC 15

(2) INFORMATION FOR SEQ ID NO: 7:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

     (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

TTAACCTTGC GACAT 15

(2) INFORMATION FOR SEQ ID NO: 8:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 15 basepairs
               (B) TYPE: nucleic acid basepairs
               (C) STRANDEDNESS: single
               (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

ACTATTCACA CGCGC 15

(2) INFORMATION FOR SEQ ID NO: 9:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 15 basepairs
               (B) TYPE: nucleic acid basepairs
               (C) STRANDEDNESS: single
               (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

CTCCGCGGTG AACCA 15

(2) INFORMATION FOR SEQ ID NO: 10:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 15 basepairs
               (B) TYPE: nucleic acid basepairs
               (C) STRANDEDNESS: single
               (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10

GCTTTACACC ACGGC 15

(2) INFORMATION FOR SEQ ID NO: 11:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 15 basepairs
               (B) TYPE: nucleic acid basepairs
               (C) STRANDEDNESS: single
               (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

ACGCTTGGGG GCCTT 15

(2) INFORMATION FOR SEQ ID NO: 12:

          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 15 basepairs
               (B) TYPE: nucleic acid basepairs
               (C) STRANDEDNESS: single
               (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

CCACACCCAC CACAA 15

(2) INFORMATION FOR SEQ ID NO:13:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

CCGGTGGCTT CGCTG 15

(2) INFORMATION FOR SEQ ID NO: 14:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

ACTTGCCTTG TCGCT 15

(2) INFORMATION FOR SEQ ID NO: 15:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GATTCGTCAC GGGCG 15

(2) INFORMATION FOR SEQ ID NO: 16:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

AACTCCACAC CCCCG 15

(2) INFORMATION FOR SEQ ID NO: 17:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

ACTCCACACC CCCGA 15

(2) INFORMATION FOR SEQ ID NO: 18:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

ACCCCTTCGC TTGAC 15

(2) INFORMATION FOR SEQ ID NO: 19:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

CTTGCCCCAG TGTTA 15

(2) INFORMATION FOR SEQ ID NO: 20:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

CTCTCCCTAC CGGCT 15

(2) INFORMATION FOR SEQ ID NO: 21:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GATATTCCGG TCCCC 15

(2) INFORMATION FOR SEQ ID NO: 22:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

ACTCCGCCCC AACTG 15

(2) INFORMATION FOR SEQ ID NO: 23:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

CTGTCCCTAA ACCCG 15

(2) INFORMATION FOR SEQ ID NO: 24:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

TTCGAGGTTA GATGC 15

(2) INFORMATION FOR SEQ ID NO: 25:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

GTCCCTAAAC CCGAT 15

(2) INFORMATION FOR SEQ ID NO: 26:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GGTGCACCAG AGGTT 15

(2) INFORMATION FOR SEQ ID NO: 27:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

CTGGCGGGAC AACTG 15

(2) INFORMATION FOR SEQ ID NO: 28:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

TTATCCTGAC CGAAC 15

(2) INFORMATION FOR SEQ ID NO: 29:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GACCTATTGA ACCCG 15

(2) INFORMATION FOR SEQ ID NO: 30:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

GAAGAGACCT TTCCG 15

(2) INFORMATION FOR SEQ ID NO: 31:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

CACTCGAGTA TCTCC 15

(2) INFORMATION FOR SEQ ID NO: 32:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

ATCACCCACG TGTTA 15

(2) INFORMATION FOR SEQ ID NO: 33:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

GCATCCCGTG GTCCT 15

(2) INFORMATION FOR SEQ ID NO: 34:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

CACAAGACAT GCATC 15

(2) INFORMATION FOR SEQ ID NO: 35:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

TAAAGCGCTT TCCAC 15

(2) INFORMATION FOR SEQ ID NO: 36:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

GCTCATCCCA CACCG 15

(2) INFORMATION FOR SEQ ID NO: 37:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

CCGAGAGAAC CCGGA 15

(2) INFORMATION FOR SEQ ID NO: 38:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

AGTCCCCACC ATTAC 15

(2) INFORMATION FOR SEQ ID NO: 39:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

AACCTCGCGG CATCG 15

(2) INFORMATION FOR SEQ ID NO: 40:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

GGC TTTTAAG GATTC 15

(2) INFORMATION FOR SEQ ID NO: 41:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

GACCCCGATC CGAAC 15

(2) INFORMATION FOR SEQ ID NO: 42:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

CCGACTTCAC GGGGT 15

(2) INFORMATION FOR SEQ ID NO: 43:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

CGGAGGGGCA GTATC 15

(2) INFORMATION FOR SEQ ID NO: 44:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GATCAATGCT CGGTT 15

(2) INFORMATION FOR SEQ ID NO: 45:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

TTCCCCGCGT TACCT 15

(2) INFORMATION FOR SEQ ID NO: 46:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

TTAGCCTGTT CCGGT 15

(2) INFORMATION FOR SEQ ID NO: 47:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

GCATGCGGTT TAGCC 15

(2) INFORMATION FOR SEQ ID NO: 48:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

TACCCGGTTG TCCAT 15

(2) INFORMATION FOR SEQ ID NO: 49:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

GTAGAGCTGA GACAT 15

(2) INFORMATION FOR SEQ ID NO: 50:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GCCGTCCCAG GCCAC 15

(2) INFORMATION FOR SEQ ID NO: 51:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

CTCGGGTGTT GATAT 15

(2) INFORMATION FOR SEQ ID NO: 52:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

ACTATTTCAC TCCCT 15

(2) INFORMATION FOR SEQ ID NO: 53:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

ACGCCATCAC CCCAC 15

(2) INFORMATION FOR SEQ ID NO: 54:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

CGACGTGTCC CTGAC 15

(2) INFORMATION FOR SEQ ID NO: 55:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

ACTACACCCC AAAGG 15

(2) INFORMATION FOR SEQ ID NO: 56:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

CACGCTTTTA CACCA 15

(2) INFORMATION FOR SEQ ID NO: 57:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

GCGACTACAC ATCCT 15

(2) INFORMATION FOR SEQ ID NO: 58:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

CGGCGCATAA TCACT 15

(2) INFORMATION FOR SEQ ID NO: 59:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

CCACATCCAC CGTAA 15

(2) INFORMATION FOR SEQ ID NO: 60:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

CGCTGAATGG GGGAC 15

(2) INFORMATION FOR SEQ ID NO: 61:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

GGAGCTTCGC TGAAT 15

(2) INFORMATION FOR SEQ ID NO: 62:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

CGGTCACCCG GAGCT 15

(2) INFORMATION FOR SEQ ID NO: 63:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

GGACGCCCAT ACACG 15

(2) INFORMATION FOR SEQ ID NO: 64:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

GAAGGGGAAT GGTCG 15

(2) INFORMATION FOR SEQ ID NO: 65:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

AATCGCCACG CCCCC 15

(2) INFORMATION FOR SEQ ID NO: 66:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

CAGCGAAGGT CCCAC 15

(2) INFORMATION FOR SEQ ID NO: 67:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

GTCACCCCAT TGCTT 15

(2) INFORMATION FOR SEQ ID NO: 68:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

ATCGCTCTCT ACGGG 15

(2) INFORMATION FOR SEQ ID NO: 69:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

GTGTATGTGC TCGCT 15

(2) INFORMATION FOR SEQ ID NO: 70:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

ACGGTATTCC GGGCC 15

(2) INFORMATION FOR SEQ ID NO: 71:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GGCCGAATCC CGCTC 15

(2) INFORMATION FOR SEQ ID NO: 72:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

AAACAGTCGC TACCC 15

(2) INFORMATION FOR SEQ ID NO: 73:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

CCTTACGGGT TAACG 15

(2) INFORMATION FOR SEQ ID NO: 74:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

GAGACAGTTG GGAAG 15

(2) INFORMATION FOR SEQ ID NO: 75:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

TGGCGTCTGT GCTTC 15

(2) INFORMATION FOR SEQ ID NO: 76:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

CGACTCCACA CAAAC 15

(2) INFORMATION FOR SEQ ID NO: 77:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GATAAGGGTT CGACG 15

(2) INFORMATION FOR SEQ ID NO: 78:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

ATCCGTTGAG TGACA 15

(2) INFORMATION FOR SEQ ID NO: 79

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

CAGCCCGTTA TCCCC 15

(2) INFORMATION FOR SEQ ID NO: 80:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

AACCTTTGGG ACCTG 15

(2) INFORMATION FOR SEQ ID NO: 81:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

TAAAAGGGTG AGAAA 15

(2) INFORMATION FOR SEQ ID NO: 82:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

GTCTGGCCTA TCAAT 15

(2) INFORMATION FOR SEQ ID NO: 83:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

AGATTGCCCA CGTGT 15

(2) INFORMATION FOR SEQ ID NO: 84

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

AATCCGAGAA AACCC 15

(2) INFORMATION FOR SEQ ID NO: 85:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GCATTACCCG CTGGC 15

(2) INFORMATION FOR SEQ ID NO: 86:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

TTAAAAGGAT TCGCT 15

(2) INFORMATION FOR SEQ ID NO: 87:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

AGACCCCAAT CCGAA 15

(2) INFORMATION FOR SEQ ID NO: 88:

```
        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

GACTCCGACT TCATG 15


(2) INFORMATION FOR SEQ ID NO: 89:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

GTCTTTTCGT CCTGC 15


(2) INFORMATION FOR SEQ ID NO: 90:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GTCTTATCGT CCTGC 15


(2) INFORMATION FOR SEQ ID NO: 91:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

GTCTTCTCGT CCTGC 15


(2) INFORMATION FOR SEQ ID NO: 92:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GTCTTGTCGT CCTGC 15


(2) INFORMATION FOR SEQ ID NO: 93:
```

(i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 15 basepairs
                 (B) TYPE: nucleic acid basepairs
                 (C) STRANDEDNESS: single
                 (D) TOPOLOGY: linear

            (xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GTCTATTCGT CCTGC 15

(2) INFORMATION FOR SEQ ID NO: 94:

            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 15 basepairs
                 (B) TYPE: nucleic acid basepairs
                 (C) STRANDEDNESS: single
                 (D) TOPOLOGY: linear

            (xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GTCTCTTCGT CCTGC 15

(2) INFORMATION FOR SEQ ID NO: 95:

            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 15 basepairs
                 (B) TYPE: nucleic acid basepairs
                 (C) STRANDEDNESS: single
                 (D) TOPOLOGY: linear

            (xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

GTCTGTTCGT CCTGC 15

(2) INFORMATION FOR SEQ ID NO: 96:

            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 15 basepairs
                 (B) TYPE: nucleic acid basepairs
                 (C) STRANDEDNESS: single
                 (D) TOPOLOGY: linear

            (xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

TTGGCCGGTG CTTCT 15

(2) INFORMATION FOR SEQ ID NO: 97:

            (i) SEQUENCE CHARACTERISTICS:
                 (A) LENGTH: 15 basepairs
                 (B) TYPE: nucleic acid basepairs
                 (C) STRANDEDNESS: single
                 (D) TOPOLOGY: linear

            (xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

TTGGCCGGTA CTTCT 15

(2) INFORMATION FOR SEQ ID NO: 98:

(i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

TTGGCCGGTC CTTCT 15

(2) INFORMATION FOR SEQ ID NO: 99:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

TTGGCCGGTT CTTCT 15

(2) INFORMATION FOR SEQ ID NO: 100:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

ACCGCGGCTG CTGGC 15

(2) INFORMATION FOR SEQ ID NO: 101:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

ACCGCGGCTA CTGGC 15

(2) INFORMATION FOR SEQ ID NO: 102:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 15 basepairs
            (B) TYPE: nucleic acid basepairs
            (C) STRANDEDNESS: single
            (D) TOPOLOGY: linear

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

ACCGCGGCTC CTGGC 15

(2) INFORMATION FOR SEQ ID NO: 103:

        (i) SEQUENCE CHARACTERISTICS:

```
                        (A)  LENGTH: 15 basepairs
                        (B)  TYPE: nucleic acid basepairs
                        (C)  STRANDEDNESS: single
                        (D)  TOPOLOGY: linear

        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO:103:

ACCGCGGCTT CTGGC 15


    (2)  INFORMATION FOR SEQ ID NO: 104:

        (i)  SEQUENCE CHARACTERISTICS:
                        (A)  LENGTH: 15 basepairs
                        (B)  TYPE: nucleic acid basepairs
                        (C)  STRANDEDNESS: single
                        (D)  TOPOLOGY: linear

        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO:104:

CGGCAGCTGG CACGT 15


    (2)  INFORMATION FOR SEQ ID NO: 105:

        (i)  SEQUENCE CHARACTERISTICS:
                        (A)  LENGTH: 15 basepairs
                        (B)  TYPE: nucleic acid basepairs
                        (C)  STRANDEDNESS: single
                        (D)  TOPOLOGY: linear

        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO:105:

CGGCCGCTGG CACGT 15


    (2)  INFORMATION FOR SEQ ID NO: 106:

        (i)  SEQUENCE CHARACTERISTICS:
                        (A)  LENGTH: 15 basepairs
                        (B)  TYPE: nucleic acid basepairs
                        (C)  STRANDEDNESS: single
                        (D)  TOPOLOGY: linear

        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO:106:

CGGCTGCTGG CACGT 15


    (2)  INFORMATION FOR SEQ ID NO: 107:

        (i)  SEQUENCE CHARACTERISTICS:
                        (A)  LENGTH: 15 basepairs
                        (B)  TYPE: nucleic acid basepairs
                        (C)  STRANDEDNESS: single
                        (D)  TOPOLOGY: linear

        (xi)  SEQUENCE DESCRIPTION: SEQ ID NO:107:

CGTATTACCG CAGCT 15


    (2)  INFORMATION FOR SEQ ID NO: 108:

        (i)  SEQUENCE CHARACTERISTICS:
                        (A)  LENGTH: 15 basepairs
```

(B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

CGTATTACCG CCGCT 15

(2) INFORMATION FOR SEQ ID NO: 109:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

CGTATTACCG CTGCT 15

(2) INFORMATION FOR SEQ ID NO: 110:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

TTCCTTTGAG TTTTA 15

(2) INFORMATION FOR SEQ ID NO: 111

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

TTCCTTTAAG TTTTA 15

(2) INFORMATION FOR SEQ ID NO: 112:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

TTCCTTTCAG TTTTA 15

(2) INFORMATION FOR SEQ ID NO: 113:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs

(B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

TTCCTTTTAG TTTTA 15

(2) INFORMATION FOR SEQ ID NO: 114:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

TTCCTTAGAG TTTTA 15

(2) INFORMATION FOR SEQ ID NO: 115:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

TTCCTTCGAG TTTTA 15

(2) INFORMATION FOR SEQ ID NO: 116:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

TTCCTTGGAG TTTTA 15

(2) INFORMATION FOR SEQ ID NO: 117:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs
        (B) TYPE: nucleic acid basepairs
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

CATGTGTCCT GTGGT 15

(2) INFORMATION FOR SEQ ID NO: 118:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 15 basepairs

(B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

CGTCAGCCCG AGAAA 15

(2) INFORMATION FOR SEQ ID NO: 119:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

CACTACACAC GCTCG 15

(2) INFORMATION FOR SEQ ID NO: 120:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

TGGCGTTGAG GTTTC 15

(2) INFORMATION FOR SEQ ID NO: 121:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GTCCGTGAAC CCGAT 15

(2) INFORMATION FOR SEQ ID NO: 122:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs
                    (C) STRANDEDNESS: single
                    (D) TOPOLOGY: linear

          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

TACGCTCTTT GAGCT 15

(2) INFORMATION FOR SEQ ID NO: 123:

          (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 15 basepairs
                    (B) TYPE: nucleic acid basepairs

        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

AACACTCCCT TTGGA 15